We claim:

- 1. A sulfated bi-modal composition, which comprises:
  - (a) between 10% and 50% by weight of an emulsifier which conforms to the following structure:

$$CH_3(CH_2)_{n-}O-(CH_2CH_2O)_a(CH_2CH(CH_3)O)_b-(CH_2CH_2O)_c-SO_3^ M^+$$

wherein;

n is an integer ranging from 5 to 19;

a, b, and c are independently each integers ranging from 0 to 20;

M is a group needed as a counter ion and selected from the group consisting of

Na, K, Ca, Mg,  $NH_4$  and  $N-(CH_2CH_2OH)_3$ ,

and

(b) between 90% and 50% of an emulsifier which conforms to the following structure:

$$(CH_2)_x CH_3 \\ | CH_3 (CH_2)_y CHCH_2 O - (CH_2 CH_2 O)_a (CH_2 CH(CH_3)O)_b - (CH_2 CH_2 O)_c - SO^3 M^+$$

wherein;

y is an integer ranging from 5 to 19, and is equal to n;

x is an integer ranging from 3 to 17 with the proviso that x = y+2M is a group needed as a counter ion and selected from the group consisting of Na, K, Ca, Mg, NH<sub>4</sub> and N-(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>3</sub>.

a, b, and c are independently each integers ranging from 0 to 20.

- 2. A sulfated bimodal composition of claim 1 wherein n is 5, x is 3 and y is 5.
- 3. A sulfated bimodal composition of claim 1 wherein n is 9, x is 7 and y is 9.
- 4. A sulfated bimodal composition of claim 1 wherein n is 7, x is 5 and y is 7.
- 5. A sulfated bimodal composition of claim 1 wherein n is 11, x is 9 and y is 11.
- 6. A sulfated bimodal composition of claim 1 wherein n is 19, x is 17 and y is 19.
- 7. A sulfated bimodal composition of claim 1 wherein M is Na.
- 8. A sulfated bimodal composition of claim 1 wherein M is K.
- 9. A sulfated bimodal composition of claim 1 wherein M is NH<sub>4</sub>.
- 10. A sulfated bimodal composition of claim 1 wherein M is Ca.
- 11. A sulfated bimodal composition of claim 1 wherein M is Mg.
- 12. A process for making an emulsion, which comprises mixing;
  - (1) between 1% and 50% by weight of a water insoluble oil,
  - (2) between 98% and 35% water

and

(3) between 1% and 15% by weight of sulfated bi-modal emulsifier compositions, which comprises:

(b) between 10% and 50% by weight of an emulsifier which conforms to the following structure:

$$CH_3(CH_2)_{n-}O-(CH_2CH_2O)_a(CH_2CH(CH_3)O)_{b-}(CH_2CH_2O)_{c-}SO_3^-M^+$$

wherein;

n is an integer ranging from 5 to 19;

a, b, and c are independently each integers ranging from 0 to 20;

M is a group needed as a counter ion and selected from the group consisting of Na, K, Ca, Mg, NH<sub>4</sub> and N-(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>3</sub>.

and

(b) between 90% and 50% of an emulsifier which conforms to the following structure:

wherein;

y is an integer ranging from 5 to 19, and is equal to n;

x is an integer ranging from 3 to 17 with the proviso that x = y+2;

M is a group needed as a counter ion and selected from the group consisting of

Na, K, Ca, Mg, NH<sub>4</sub> and N-(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>3</sub>;

a, b, and c are independently each integers ranging from 0 to 20.

- 13. A process of claim 12 wherein n is 5, x is 3 and y is 5.
- 14. A process of claim 12 wherein n is 9, x is 7 and y is 9.
- 15. A process of claim 12 wherein n is 7, x is 5 and y is 7.
- 16. A process of claim 12 wherein n is 11, x is 9 and y is 11.
- 17. A process of claim 12 wherein n is 19, x is 17 and y is 19.
- 18. A process of claim 12 wherein M is Ca.
- 19. A process of claim 12 wherein M is Mg.